



2004 TRI Public Data Release eReport

Data Tables and Charts Section E – Quantities of TRI Chemicals in Waste

Quantities of TRI Chemicals in Waste, 2004

| Waste Management Activity | 2004 | |
|--|-----------------------|----------------|
| | Pounds | Percent |
| Quantity Recycled | 9,526,403,262 | 36.5 |
| Quantity Recycled On-site | 7,239,455,631 | 27.7 |
| Quantity Recycled Off-site | 2,286,947,632 | 8.8 |
| Quantity Used for Energy Recovery | 3,256,798,226 | 12.5 |
| Quantity Used for Energy Recovery On-site | 2,608,779,400 | 10.0 |
| Quantity Used for Energy Recovery Off-site | 648,018,826 | 2.5 |
| Quantity Treated | 9,002,539,771 | 34.5 |
| Quantity Treated On-site | 8,439,890,564 | 32.3 |
| Quantity Treated Off-site | 562,649,206 | 2.2 |
| Total Quantity Disposed of or Otherwise Released | 4,335,768,911 | 16.6 |
| Total On-site Disposal to Class I Underground Injection Wells, RCRA Subtitle C Landfills, and Other Landfills | 595,350,668 | 2.3 |
| Total Other On-site Disposal or Other Releases | 3,093,631,222 | 11.8 |
| Total Off-site Disposal to Class I Underground Injection Wells, RCRA Subtitle C Landfills, and Other Landfills | 397,671,638 | 1.5 |
| Total Other Off-site Disposal or Other Releases | 249,115,383 | 1.0 |
| Total Production-related Waste Managed | 26,121,510,170 | 100.0 |
| Non-production-related Waste Managed | 21,520,859 | |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data document at www.epa.gov/tri/tridata.

Data are from TRI Form R Section 8.

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: All Industries

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 1,067,005,508 | 73,894,906 | 1,140,900,414 |
| 7440-50-8 Copper | 431,004,212 | 538,699,050 | 969,703,262 |
| 110-54-3 n-Hexane | 784,378,866 | 14,337,717 | 798,716,582 |
| -- Lead compounds | 424,269,607 | 241,140,629 | 665,410,236 |
| 67-56-1 Methanol | 542,598,583 | 12,342,031 | 554,940,614 |
| 98-82-8 Cumene | 475,230,926 | 3,262,289 | 478,493,215 |
| -- Zinc compounds | 79,021,365 | 369,292,769 | 448,314,134 |
| 107-21-1 Ethylene glycol | 348,014,543 | 75,287,611 | 423,302,154 |
| 107-06-2 1,2-Dichloroethane | 389,536,610 | 2,732,556 | 392,269,166 |
| 7782-50-5 Chlorine | 284,299,099 | 338,320 | 284,637,419 |
| -- Copper compounds | 130,471,175 | 130,033,119 | 260,504,294 |
| 1330-20-7 Xylene (mixed isomers) | 137,462,633 | 87,762,338 | 225,224,971 |
| 107-13-1 Acrylonitrile | 225,212,762 | 10,113 | 225,222,875 |
| 75-09-2 Dichloromethane | 145,620,541 | 12,539,581 | 158,160,122 |
| 75-01-4 Vinyl chloride | 133,468,573 | 370 | 133,468,943 |
| 79-01-6 Trichloroethylene | 128,414,485 | 2,168,627 | 130,583,112 |
| -- Glycol ethers | 124,172,134 | 1,999,905 | 126,172,039 |
| 7664-41-7 Ammonia | 111,054,210 | 2,429,628 | 113,483,837 |
| 1634-04-4 Methyl tert-butyl ether | 5,240,758 | 105,329,184 | 110,569,942 |
| -- Chromium compounds | 74,760,750 | 31,867,677 | 106,628,427 |
| Subtotal for Top 20 Chemicals | 6,041,237,339 | 1,705,468,418 | 7,746,705,757 |
| Total for all TRI Chemicals | 7,239,455,631 | 2,286,947,632 | 9,526,403,262 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Manufacturing* Industries

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 1,038,960,032 | 26,572,141 | 1,065,532,173 |
| 7440-50-8 Copper | 431,004,212 | 536,556,578 | 967,560,789 |
| 110-54-3 n-Hexane | 780,779,039 | 4,994,010 | 785,773,049 |
| -- Lead compounds | 423,131,561 | 238,276,820 | 661,408,381 |
| 67-56-1 Methanol | 536,619,062 | 12,223,175 | 548,842,237 |
| 98-82-8 Cumene | 475,162,409 | 2,664,129 | 477,826,538 |
| -- Zinc compounds | 69,582,447 | 367,212,485 | 436,794,932 |
| 107-06-2 1,2-Dichloroethane | 389,536,610 | 2,731,651 | 392,268,261 |
| 107-21-1 Ethylene glycol | 334,330,709 | 53,561,253 | 387,891,962 |
| 7782-50-5 Chlorine | 280,904,230 | 332,808 | 281,237,038 |
| -- Copper compounds | 129,189,163 | 128,743,455 | 257,932,618 |
| 107-13-1 Acrylonitrile | 225,212,762 | 10,113 | 225,222,875 |
| 75-09-2 Dichloromethane | 133,797,201 | 12,118,708 | 145,915,909 |
| 75-01-4 Vinyl chloride | 133,468,573 | 370 | 133,468,943 |
| 1330-20-7 Xylene (mixed isomers) | 106,780,070 | 25,377,039 | 132,157,109 |
| 79-01-6 Trichloroethylene | 126,243,260 | 2,138,301 | 128,381,561 |
| -- Glycol ethers | 123,385,779 | 1,799,801 | 125,185,580 |
| 7664-41-7 Ammonia | 107,111,955 | 2,227,751 | 109,339,705 |
| 7440-02-0 Nickel | 21,182,078 | 83,981,414 | 105,163,492 |
| -- Chromium compounds | 74,759,694 | 30,140,836 | 104,900,530 |
| Subtotal for Top 20 Chemicals | 5,941,140,845 | 1,531,662,838 | 7,472,803,682 |
| Total for all TRI Chemicals | 7,083,449,178 | 1,984,617,598 | 9,068,066,776 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

* Manufacturing industries include SIC code 20-39 and "no codes" category.

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Chemicals (SIC Code 28)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 734,083,867 | 12,058,151 | 746,142,018 |
| 67-56-1 Methanol | 532,087,591 | 10,421,959 | 542,509,550 |
| 98-82-8 Cumene | 474,068,863 | 2,571,993 | 476,640,856 |
| 107-06-2 1,2-Dichloroethane | 389,536,500 | 2,731,640 | 392,268,140 |
| 107-21-1 Ethylene glycol | 290,695,636 | 25,183,073 | 315,878,709 |
| 107-13-1 Acrylonitrile | 225,212,762 | 10,113 | 225,222,875 |
| 75-01-4 Vinyl chloride | 133,468,573 | 370 | 133,468,943 |
| 75-09-2 Dichloromethane | 121,423,039 | 11,081,491 | 132,504,530 |
| -- Glycol ethers | 122,877,139 | 448,288 | 123,325,427 |
| 1330-20-7 Xylene (mixed isomers) | 78,405,767 | 11,807,955 | 90,213,722 |
| 7664-41-7 Ammonia | 79,740,048 | 643,254 | 80,383,302 |
| 74-85-1 Ethylene | 77,655,652 | 0 | 77,655,652 |
| 108-95-2 Phenol | 59,260,583 | 42,489 | 59,303,072 |
| 115-07-1 Propylene | 51,268,146 | 0 | 51,268,146 |
| 79-00-5 1,1,2-Trichloroethane | 44,629,164 | 4,674,320 | 49,303,484 |
| 7647-01-0 Hydrochloric acid | 48,783,512 | 0 | 48,783,512 |
| -- Nitrate compounds | 46,108,451 | 3,423 | 46,111,874 |
| 71-43-2 Benzene | 41,800,482 | 2,353,933 | 44,154,415 |
| 108-10-1 Methyl isobutyl ketone | 36,441,123 | 4,786,443 | 41,227,566 |
| 7782-50-5 Chlorine | 40,012,957 | 8,265 | 40,021,222 |
| Subtotal for Top 20 Chemicals | 3,627,559,855 | 88,827,160 | 3,716,387,014 |
| Total for all TRI Chemicals | 3,974,135,982 | 160,675,828 | 4,134,811,810 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Primary Metals (SIC Code 33)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 7440-50-8 Copper | 389,707,955 | 234,617,179 | 624,325,134 |
| -- Lead compounds | 326,981,300 | 47,828,427 | 374,809,727 |
| -- Zinc compounds | 56,118,966 | 293,280,040 | 349,399,006 |
| 7782-50-5 Chlorine | 240,543,961 | 161,668 | 240,705,629 |
| -- Copper compounds | 113,397,235 | 57,415,837 | 170,813,071 |
| -- Chromium compounds | 66,863,737 | 19,901,549 | 86,765,286 |
| -- Manganese compounds | 37,606,040 | 43,979,606 | 81,585,646 |
| 79-01-6 Trichloroethylene | 48,250,340 | 261,075 | 48,511,415 |
| -- Nickel compounds | 29,897,716 | 12,934,642 | 42,832,357 |
| 7440-02-0 Nickel | 19,615,401 | 14,681,962 | 34,297,363 |
| 7439-96-5 Manganese | 17,720,941 | 11,781,466 | 29,502,407 |
| 7439-92-1 Lead | 21,893,661 | 5,664,351 | 27,558,012 |
| 127-18-4 Tetrachloroethylene | 25,671,150 | 2,975 | 25,674,125 |
| 7440-47-3 Chromium | 6,724,400 | 15,001,691 | 21,726,092 |
| 7664-39-3 Hydrogen fluoride | 19,210,382 | 34,376 | 19,244,758 |
| 7440-66-6 Zinc (fume or dust) | 1,005,648 | 17,172,407 | 18,178,055 |
| 108-10-1 Methyl isobutyl ketone | 17,609,700 | 16,554 | 17,626,254 |
| 7550-45-0 Titanium tetrachloride | 16,538,427 | 0 | 16,538,427 |
| 7647-01-0 Hydrochloric acid | 15,511,965 | 718,172 | 16,230,137 |
| 7697-37-2 Nitric acid | 14,723,299 | 703,921 | 15,427,220 |
| Subtotal for Top 20 Chemicals | 1,485,592,225 | 776,157,897 | 2,261,750,122 |
| Total for all TRI Chemicals | 1,514,580,140 | 800,052,819 | 2,314,632,958 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Paper Products (SIC Code 26)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 59,591,759 | 1,498,635 | 61,090,394 |
| 110-54-3 n-Hexane | 6,148,296 | 161,396 | 6,309,692 |
| 75-15-0 Carbon disulfide | 3,659,700 | 0 | 3,659,700 |
| 872-50-4 N-Methyl-2-pyrrolidone | 30,036 | 571,586 | 601,622 |
| 110-82-7 Cyclohexane | 545,600 | 0 | 545,600 |
| 7782-50-5 Chlorine | 313,690 | 0 | 313,690 |
| 107-21-1 Ethylene glycol | 0 | 260,988 | 260,988 |
| 1330-20-7 Xylene (mixed isomers) | 88,274 | 170,635 | 258,909 |
| 0049-04-4 Chlorine dioxide | 248,400 | 0 | 248,400 |
| 7429-90-5 Aluminum (fume or dust) | 0 | 156,000 | 156,000 |
| -- Barium compounds | 0 | 121,988 | 121,988 |
| -- Manganese compounds | 0 | 119,273 | 119,273 |
| 92-52-4 Biphenyl | 113,275 | 0 | 113,275 |
| 67-56-1 Methanol | 75,616 | 2,788 | 78,404 |
| -- Nickel compounds | 0 | 58,023 | 58,023 |
| -- Zinc compounds | 23,708 | 10,098 | 33,806 |
| 7664-41-7 Ammonia | 25,250 | 350 | 25,600 |
| 7440-66-6 Zinc (fume or dust) | 0 | 22,680 | 22,680 |
| -- Lead compounds | 0 | 22,592 | 22,592 |
| 100-41-4 Ethylbenzene | 7,400 | 14,754 | 22,154 |
| Subtotal for Top 20 Chemicals | 70,871,004 | 3,191,786 | 74,062,790 |
| Total for all TRI Chemicals | 70,916,058 | 3,235,387 | 74,151,445 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Food Products (SIC Code 20)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 110-54-3 n-Hexane | 764,204,264 | 13,000 | 764,217,264 |
| 7664-41-7 Ammonia | 24,231,112 | 384,003 | 24,615,115 |
| 67-56-1 Methanol | 3,228,562 | 34,377 | 3,262,939 |
| 7664-93-9 Sulfuric acid | 599,140 | 0 | 599,140 |
| 7440-02-0 Nickel | 10,000 | 578,604 | 588,604 |
| 7697-37-2 Nitric acid | 555,695 | 0 | 555,695 |
| -- Nickel compounds | 0 | 352,839 | 352,839 |
| 107-21-1 Ethylene glycol | 0 | 201,473 | 201,473 |
| -- Chromium compounds | 69,189 | 100,300 | 169,489 |
| 108-88-3 Toluene | 81,824 | 31,182 | 113,006 |
| -- Zinc compounds | 68,991 | 36,429 | 105,420 |
| -- Barium compounds | 0 | 82,000 | 82,000 |
| -- Nitrate compounds | 52,589 | 27,654 | 80,243 |
| 79-11-8 Chloroacetic acid | 49,331 | 0 | 49,331 |
| 7782-50-5 Chlorine | 33,622 | 0 | 33,622 |
| -- Manganese compounds | 18,027 | 4,812 | 22,839 |
| -- Copper compounds | 16,287 | 1,200 | 17,487 |
| 7439-92-1 Lead | 0 | 14,051 | 14,051 |
| -- Lead compounds | 0 | 4,605 | 4,605 |
| 94-36-0 Benzoyl peroxide | 4,423 | 0 | 4,423 |
| Subtotal for Top 20 Chemicals | 793,223,056 | 1,866,529 | 795,089,584 |
| Total for all TRI Chemicals | 793,227,988 | 1,867,437 | 795,095,425 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Metal Mining (SIC Code 10)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| -- Zinc compounds | 9,438,348 | 1,070,564 | 10,508,912 |
| 7664-41-7 Ammonia | 3,878,875 | 0 | 3,878,875 |
| -- Lead compounds | 1,137,328 | 2,117,734 | 3,255,062 |
| -- Nitrate compounds | 2,859,825 | 0 | 2,859,825 |
| -- Copper compounds | 1,282,012 | 375,566 | 1,657,578 |
| -- Cyanide compounds | 516,745 | 0 | 516,745 |
| -- Cadmium compounds | 209,924 | 881 | 210,805 |
| -- Nickel compounds | 89,586 | 53,809 | 143,395 |
| 7440-47-3 Chromium | 0 | 126,670 | 126,670 |
| -- Arsenic compounds | 118,928 | 5 | 118,933 |
| -- Manganese compounds | 88,840 | 21,235 | 110,075 |
| -- Mercury compounds | 65,084 | 42,920 | 108,005 |
| -- Vanadium compounds | 96,285 | 0 | 96,285 |
| -- Antimony compounds | 59,292 | 2 | 59,294 |
| 74-90-8 Hydrogen cyanide | 47,585 | 0 | 47,585 |
| 7439-96-5 Manganese | 0 | 39,884 | 39,884 |
| -- Chromium compounds | 1,056 | 32,379 | 33,435 |
| -- Cobalt compounds | 22,000 | 2,100 | 24,100 |
| -- Selenium compounds | 19,982 | 0 | 19,982 |
| 107-21-1 Ethylene glycol | 0 | 19,601 | 19,601 |
| Subtotal for Top 20 Chemicals | 19,931,695 | 3,903,350 | 23,835,045 |
| Total for all TRI Chemicals | 19,948,055 | 3,914,256 | 23,862,311 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The Chemicals with Largest Total Recycling On-site and Off-site, 2004: Coal Mining (SIC Code 12)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|------------------------------------|---|--|--|
| 7664-41-7 Ammonia | 16,420 | 0 | 16,420 |
| -- Chromium compounds | 0 | 826 | 826 |
| -- Nickel compounds | 0 | 661 | 661 |
| -- Zinc compounds | 0 | 528 | 528 |
| -- Manganese compounds | 0 | 231 | 231 |
| -- Copper compounds | 0 | 30 | 30 |
| -- Antimony compounds | 0 | 19 | 19 |
| -- Lead compounds | 0 | 18 | 18 |
| -- Mercury compounds | 0 | 2 | 2 |
| Total for all TRI Chemicals | 16,420 | 2,315 | 18,735 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Electric Utilities (SIC Code 491/493)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--|---|--|--|
| 7440-62-2 Vanadium (except when contained in an alloy) | 0 | 5,669,498 | 5,669,498 |
| -- Chromium compounds | 0 | 1,610,462 | 1,610,462 |
| 7440-02-0 Nickel | 0 | 1,162,688 | 1,162,688 |
| -- Nickel compounds | 0 | 1,054,768 | 1,054,768 |
| -- Barium compounds | 0 | 932,685 | 932,685 |
| -- Manganese compounds | 0 | 735,363 | 735,363 |
| 7440-39-3 Barium | 0 | 700,087 | 700,087 |
| -- Zinc compounds | 0 | 640,945 | 640,945 |
| -- Copper compounds | 0 | 547,424 | 547,424 |
| 7440-66-6 Zinc (fume or dust) | 0 | 326,366 | 326,366 |
| -- Vanadium compounds | 0 | 232,231 | 232,231 |
| 107-21-1 Ethylene glycol | 0 | 80,305 | 80,305 |
| -- Lead compounds | 0 | 48,560 | 48,560 |
| -- Antimony compounds | 0 | 22,000 | 22,000 |
| 7440-50-8 Copper | 0 | 10,728 | 10,728 |
| 7439-96-5 Manganese | 0 | 10,588 | 10,588 |
| -- Cobalt compounds | 0 | 8,653 | 8,653 |
| 7782-50-5 Chlorine | 3,117 | 5,512 | 8,629 |
| 7439-92-1 Lead | 0 | 6,916 | 6,916 |
| -- Polycyclic aromatic compounds | 0 | 6,793 | 6,793 |
| Subtotal for Top 20 Chemicals | 3,117 | 13,812,571 | 13,815,688 |
| Total for all TRI Chemicals | 3,117 | 13,822,866 | 13,825,983 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Chemical Wholesale Distributors (SIC Code 5169)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|---|---|--|--|
| 1330-20-7 Xylene (mixed isomers) | 8,560,691 | 652,912 | 9,213,603 |
| 108-88-3 Toluene | 1,793,458 | 893,182 | 2,686,640 |
| 108-10-1 Methyl isobutyl ketone | 1,940,826 | 395,305 | 2,336,131 |
| 67-56-1 Methanol | 1,025,671 | 40,558 | 1,066,229 |
| 71-36-3 n-Butyl alcohol | 442,353 | 35,939 | 478,292 |
| 7782-50-5 Chlorine | 473,000 | 0 | 473,000 |
| -- Glycol ethers | 3,650 | 187,663 | 191,313 |
| 7664-41-7 Ammonia | 46,960 | 141,646 | 188,606 |
| 75-09-2 Dichloromethane | 14,010 | 119,941 | 133,951 |
| 68-12-2 N,N-Dimethylformamide | 102,180 | 0 | 102,180 |
| 107-21-1 Ethylene glycol | 78,005 | 614 | 78,619 |
| 100-41-4 Ethylbenzene | 9,026 | 46,169 | 55,195 |
| -- Zinc compounds | 570 | 44,442 | 45,012 |
| 95-63-6 1,2,4-Trimethylbenzene | 20,581 | 19,367 | 39,948 |
| 7664-39-3 Hydrogen fluoride | 25,429 | 0 | 25,429 |
| 79-01-6 Trichloroethylene | 0 | 18,526 | 18,526 |
| 67-66-3 Chloroform | 0 | 18,264 | 18,264 |
| 127-18-4 Tetrachloroethylene | 5,148 | 1,480 | 6,628 |
| 1717-00-6 1,1-Dichloro-1-fluoroethane (HCFC-141b) | 5,000 | 0 | 5,000 |
| -- Arsenic compounds | 0 | 4,795 | 4,795 |
| Subtotal for Top 20 Chemicals | 14,546,558 | 2,620,803 | 17,167,361 |
| Total for all TRI Chemicals | 14,550,522 | 2,622,274 | 17,172,796 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Petroleum Terminals/Bulk Storage (SIC Code 5171)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--|---|--|--|
| 1634-04-4 Methyl tert-butyl ether | 2,967,639 | 103,661,927 | 106,629,566 |
| 1330-20-7 Xylene (mixed isomers) | 4,547,075 | 61,732,281 | 66,279,357 |
| 108-88-3 Toluene | 4,733,672 | 46,427,787 | 51,161,459 |
| 95-63-6 1,2,4-Trimethylbenzene | 1,327,775 | 15,431,296 | 16,759,070 |
| 100-41-4 Ethylbenzene | 1,084,893 | 9,959,247 | 11,044,140 |
| 110-54-3 n-Hexane | 1,226,447 | 9,343,707 | 10,570,154 |
| 71-43-2 Benzene | 871,464 | 3,183,061 | 4,054,526 |
| 110-82-7 Cyclohexane | 383,067 | 1,706,974 | 2,090,042 |
| 91-20-3 Naphthalene | 85,790 | 1,281,139 | 1,366,929 |
| 98-82-8 Cumene | 67,685 | 598,154 | 665,839 |
| 76-14-2 Dichlorotetrafluoroethane (CFC-114) | 177,230 | 0 | 177,230 |
| 107-21-1 Ethylene glycol | 0 | 170,512 | 170,512 |
| 353-59-3 Bromochlorodifluoromethane (Halon 1211) | 118,500 | 0 | 118,500 |
| 75-71-8 Dichlorodifluoromethane (CFC-12) | 80,665 | 0 | 80,665 |
| 75-63-8 Bromotrifluoromethane (Halon 1301) | 41,734 | 0 | 41,734 |
| 75-69-4 Trichlorofluoromethane (CFC-11) | 26,600 | 0 | 26,600 |
| 100-42-5 Styrene | 18,902 | 192 | 19,094 |
| -- Polycyclic aromatic compounds | 11 | 12,963 | 12,974 |
| 191-24-2 Benzo(g,h,i)perylene | 4 | 1,763 | 1,767 |
| -- Zinc compounds | 0 | 1,762 | 1,762 |
| Subtotal for Top 20 Chemicals | 17,759,155 | 253,512,766 | 271,271,921 |
| Total for all TRI Chemicals | 17,759,165 | 253,516,645 | 271,275,810 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2004: Hazardous Waste/Solvent Recovery (SIC Code 7389/4953)

| CAS Number Chemname | Quantity Recycled On-site Pounds | Quantity Recycled Off-site Pounds | Total Quantity Recycled On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 107-21-1 Ethylene glycol | 13,605,829 | 21,455,326 | 35,061,155 |
| 108-88-3 Toluene | 21,518,346 | 1,795 | 21,520,141 |
| 1330-20-7 Xylene (mixed isomers) | 17,574,797 | 105 | 17,574,902 |
| 75-09-2 Dichloromethane | 11,809,330 | 300,932 | 12,110,262 |
| 127-18-4 Tetrachloroethylene | 9,387,453 | 1,248,808 | 10,636,261 |
| 872-50-4 N-Methyl-2-pyrrolidone | 6,134,236 | 232,327 | 6,366,563 |
| 67-56-1 Methanol | 4,953,850 | 78,298 | 5,032,148 |
| 7782-50-5 Chlorine | 2,918,752 | 0 | 2,918,752 |
| 108-10-1 Methyl isobutyl ketone | 2,622,095 | 0 | 2,622,095 |
| 110-54-3 n-Hexane | 2,371,452 | 0 | 2,371,452 |
| 79-01-6 Trichloroethylene | 2,171,225 | 11,800 | 2,183,025 |
| 7440-50-8 Copper | 0 | 2,126,913 | 2,126,913 |
| 100-41-4 Ethylbenzene | 1,508,762 | 0 | 1,508,762 |
| 7439-92-1 Lead | 547,246 | 312,089 | 859,336 |
| -- Glycol ethers | 782,706 | 12,440 | 795,146 |
| -- Lead compounds | 717 | 697,120 | 697,837 |
| -- Nickel compounds | 11,792 | 665,010 | 676,802 |
| 108-90-7 Chlorobenzene | 640,467 | 0 | 640,467 |
| 95-50-1 1,2-Dichlorobenzene | 581,523 | 0 | 581,523 |
| 68-12-2 N,N-Dimethylformamide | 557,843 | 0 | 557,843 |
| Subtotal for Top 20 Chemicals | 99,698,422 | 27,142,963 | 126,841,385 |
| Total for all TRI Chemicals | 103,729,174 | 28,451,678 | 132,180,852 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.4, Column B (Recycled on-site) and Section 8.5, Column B (Recycled off-site).

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: All Industries

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 74-85-1 Ethylene | 531,309,917 | 20,677,714 | 551,987,631 |
| 67-56-1 Methanol | 338,563,351 | 158,495,715 | 497,059,065 |
| 108-88-3 Toluene | 147,365,007 | 133,839,092 | 281,204,099 |
| 115-07-1 Propylene | 255,874,883 | 357 | 255,875,240 |
| 1330-20-7 Xylene (mixed isomers) | 79,581,284 | 91,462,234 | 171,043,519 |
| 7664-41-7 Ammonia | 128,713,696 | 37,710 | 128,751,406 |
| 7664-93-9 Sulfuric acid | 122,302,349 | 0 | 122,302,349 |
| 71-43-2 Benzene | 68,065,748 | 1,950,174 | 70,015,922 |
| 75-05-8 Acetonitrile | 45,949,313 | 11,692,664 | 57,641,977 |
| 107-06-2 1,2-Dichloroethane | 54,401,569 | 345,484 | 54,747,053 |
| 110-54-3 n-Hexane | 31,964,719 | 21,213,651 | 53,178,370 |
| 100-42-5 Styrene | 34,586,643 | 13,665,191 | 48,251,834 |
| 100-41-4 Ethylbenzene | 31,556,907 | 12,419,690 | 43,976,597 |
| 75-56-9 Propylene oxide | 36,983,700 | 2,721,312 | 39,705,012 |
| 75-65-0 tert-Butyl alcohol | 25,223,581 | 13,688,449 | 38,912,030 |
| 75-00-3 Chloroethane | 37,918,361 | 30,327 | 37,948,688 |
| 75-07-0 Acetaldehyde | 35,325,302 | 509,175 | 35,834,477 |
| 108-10-1 Methyl isobutyl ketone | 15,903,531 | 14,951,229 | 30,854,760 |
| 79-10-7 Acrylic acid | 27,504,517 | 2,665,162 | 30,169,679 |
| 74-90-8 Hydrogen cyanide | 28,174,102 | 12,697 | 28,186,799 |
| Subtotal for Top 20 Chemicals | 2,077,268,481 | 500,378,028 | 2,577,646,509 |
| Total for all TRI Chemicals | 2,608,779,400 | 648,019,076 | 3,256,798,476 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Manufacturing* Industries

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 74-85-1 Ethylene | 531,289,817 | 20,677,714 | 551,967,531 |
| 67-56-1 Methanol | 338,283,394 | 122,986,604 | 461,269,998 |
| 115-07-1 Propylene | 255,544,883 | 357 | 255,545,240 |
| 108-88-3 Toluene | 147,102,945 | 69,883,622 | 216,986,567 |
| 7664-41-7 Ammonia | 128,713,696 | 37,710 | 128,751,406 |
| 1330-20-7 Xylene (mixed isomers) | 79,265,386 | 46,784,709 | 126,050,095 |
| 7664-93-9 Sulfuric acid | 122,302,349 | 0 | 122,302,349 |
| 71-43-2 Benzene | 67,985,421 | 1,637,097 | 69,622,518 |
| 107-06-2 1,2-Dichloroethane | 54,388,679 | 299,898 | 54,688,577 |
| 75-05-8 Acetonitrile | 45,852,926 | 8,112,606 | 53,965,532 |
| 110-54-3 n-Hexane | 31,808,238 | 15,292,605 | 47,100,843 |
| 100-42-5 Styrene | 34,583,973 | 10,308,930 | 44,892,903 |
| 75-56-9 Propylene oxide | 36,983,700 | 2,691,412 | 39,675,112 |
| 100-41-4 Ethylbenzene | 31,539,098 | 8,134,903 | 39,674,001 |
| 75-65-0 tert-Butyl alcohol | 25,223,581 | 13,211,277 | 38,434,858 |
| 75-00-3 Chloroethane | 37,918,361 | 30,327 | 37,948,688 |
| 75-07-0 Acetaldehyde | 35,316,536 | 504,929 | 35,821,465 |
| 79-10-7 Acrylic acid | 27,504,321 | 2,660,681 | 30,165,002 |
| 74-90-8 Hydrogen cyanide | 28,174,102 | 12,697 | 28,186,799 |
| 108-95-2 Phenol | 18,959,535 | 5,727,342 | 24,686,877 |
| Subtotal for Top 20 Chemicals | 2,078,740,942 | 328,995,420 | 2,407,736,362 |
| Total for all TRI Chemicals | 2,604,794,509 | 447,565,577 | 3,052,360,086 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

* Manufacturing industries include SIC code 20-39 and "no codes" category.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Chemicals (SIC Code 28)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 74-85-1 Ethylene | 232,841,037 | 20,677,512 | 253,518,549 |
| 67-56-1 Methanol | 111,479,352 | 113,751,237 | 225,230,589 |
| 115-07-1 Propylene | 187,522,397 | 343 | 187,522,740 |
| 7664-93-9 Sulfuric acid | 122,302,349 | 0 | 122,302,349 |
| 108-88-3 Toluene | 26,335,067 | 49,622,233 | 75,957,301 |
| 107-06-2 1,2-Dichloroethane | 52,274,849 | 179,898 | 52,454,747 |
| 71-43-2 Benzene | 46,282,209 | 1,512,243 | 47,794,452 |
| 75-05-8 Acetonitrile | 39,878,046 | 7,375,644 | 47,253,690 |
| 75-56-9 Propylene oxide | 36,983,700 | 2,691,405 | 39,675,105 |
| 75-65-0 tert-Butyl alcohol | 24,763,784 | 13,196,597 | 37,960,381 |
| 75-00-3 Chloroethane | 37,918,361 | 30,327 | 37,948,688 |
| 110-54-3 n-Hexane | 22,525,018 | 14,363,257 | 36,888,275 |
| 1330-20-7 Xylene (mixed isomers) | 3,806,759 | 32,756,143 | 36,562,902 |
| 75-07-0 Acetaldehyde | 34,061,833 | 488,376 | 34,550,209 |
| 7664-41-7 Ammonia | 33,076,773 | 35,577 | 33,112,350 |
| 79-10-7 Acrylic acid | 27,504,321 | 2,645,742 | 30,150,063 |
| 100-42-5 Styrene | 19,761,794 | 8,731,230 | 28,493,024 |
| 74-90-8 Hydrogen cyanide | 25,676,379 | 12,688 | 25,689,067 |
| 98-86-2 Acetophenone | 22,328,699 | 1,423,147 | 23,751,846 |
| 75-01-4 Vinyl chloride | 22,918,841 | 48 | 22,918,889 |
| Subtotal for Top 20 Chemicals | 1,130,241,569 | 269,493,648 | 1,399,735,217 |
| Total for all TRI Chemicals | 1,509,681,417 | 372,993,558 | 1,882,674,976 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Primary Metals (SIC Code 33)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 74-85-1 Ethylene | 133,703,357 | 0 | 133,703,357 |
| 71-43-2 Benzene | 19,622,130 | 12,000 | 19,634,130 |
| 1330-20-7 Xylene (mixed isomers) | 3,301,024 | 2,241,324 | 5,542,348 |
| 108-88-3 Toluene | 2,832,655 | 1,048,729 | 3,881,384 |
| 115-07-1 Propylene | 2,322,667 | 0 | 2,322,667 |
| -- Glycol ethers | 1,878,077 | 295,360 | 2,173,437 |
| 95-63-6 1,2,4-Trimethylbenzene | 1,469,819 | 213,463 | 1,683,282 |
| 67-56-1 Methanol | 685,275 | 414,679 | 1,099,954 |
| 100-41-4 Ethylbenzene | 783,898 | 265,817 | 1,049,715 |
| 108-95-2 Phenol | 772,328 | 188,338 | 960,666 |
| 108-10-1 Methyl isobutyl ketone | 518,847 | 69,951 | 588,798 |
| 71-36-3 n-Butyl alcohol | 511,356 | 66,763 | 578,118 |
| 7664-41-7 Ammonia | 549,247 | 0 | 549,247 |
| 91-20-3 Naphthalene | 392,582 | 19,891 | 412,473 |
| 872-50-4 N-Methyl-2-pyrrolidone | 187,438 | 152,809 | 340,247 |
| 1319-77-3 Cresol (mixed isomers) | 216,687 | 79,636 | 296,323 |
| 7440-47-3 Chromium | 0 | 158,818 | 158,818 |
| 108-39-4 m-Cresol | 94,818 | 19,687 | 114,505 |
| 75-09-2 Dichloromethane | 0 | 96,444 | 96,444 |
| 100-42-5 Styrene | 0 | 94,095 | 94,095 |
| Subtotal for Top 20 Chemicals | 169,842,205 | 5,437,803 | 175,280,008 |
| Total for all TRI Chemicals | 170,080,079 | 5,798,899 | 175,878,978 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Paper Products (SIC Code 26)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 67-56-1 Methanol | 173,465,889 | 227,106 | 173,692,995 |
| 108-88-3 Toluene | 2,794,348 | 3,570,632 | 6,364,980 |
| 120-80-9 Catechol | 3,856,996 | 1,101 | 3,858,097 |
| 75-07-0 Acetaldehyde | 1,254,703 | 156 | 1,254,859 |
| 108-95-2 Phenol | 943,808 | 2,559 | 946,367 |
| 7664-41-7 Ammonia | 891,207 | 914 | 892,121 |
| 1330-20-7 Xylene (mixed isomers) | 539,119 | 220,463 | 759,582 |
| 107-21-1 Ethylene glycol | 670,086 | 59,984 | 730,070 |
| 50-00-0 Formaldehyde | 219,190 | 1,536 | 220,726 |
| 110-54-3 n-Hexane | 110,275 | 99,976 | 210,251 |
| 108-10-1 Methyl isobutyl ketone | 73,087 | 26,725 | 99,812 |
| 100-41-4 Ethylbenzene | 84,661 | 9,616 | 94,277 |
| 1319-77-3 Cresol (mixed isomers) | 81,451 | 1 | 81,452 |
| 872-50-4 N-Methyl-2-pyrrolidone | 4,493 | 50,045 | 54,538 |
| -- Polycyclic aromatic compounds | 50,072 | 0 | 50,072 |
| -- Glycol ethers | 3 | 37,896 | 37,899 |
| 108-05-4 Vinyl acetate | 11,689 | 20,974 | 32,663 |
| 110-82-7 Cyclohexane | 26,711 | 0 | 26,711 |
| 79-10-7 Acrylic acid | 0 | 14,939 | 14,939 |
| 95-63-6 1,2,4-Trimethylbenzene | 0 | 14,300 | 14,300 |
| Subtotal for Top 20 Chemicals | 185,077,788 | 4,358,923 | 189,436,711 |
| Total for all TRI Chemicals | 185,095,454 | 4,375,859 | 189,471,313 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Food Products (SIC Code 20)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|---|---|--|--|
| -- Polycyclic aromatic compounds | 547,253 | 0 | 547,253 |
| 191-24-2 Benzo(g,h,i)perylene | 133,455 | 0 | 133,455 |
| 108-88-3 Toluene | 0 | 69,671 | 69,671 |
| 91-20-3 Naphthalene | 50,577 | 0 | 50,577 |
| 110-54-3 n-Hexane | 0 | 40,403 | 40,403 |
| 67-56-1 Methanol | 0 | 38,278 | 38,278 |
| 75-07-0 Acetaldehyde | 0 | 16,323 | 16,323 |
| 1330-20-7 Xylene (mixed isomers) | 4,700 | 4,350 | 9,050 |
| 110-82-7 Cyclohexane | 0 | 2,000 | 2,000 |
| 7664-41-7 Ammonia | 1,800 | 0 | 1,800 |
| 75-45-6 Chlorodifluoromethane (HCFC-22) | 0 | 122 | 122 |
| Total for all TRI Chemicals | 737,786 | 171,147 | 908,933 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Metal Mining (SIC Code 10)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|------------------------------------|---|--|--|
| -- Polycyclic aromatic compounds | 0 | 51 | 51 |
| Total for all TRI Chemicals | 0 | 51 | 51 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Coal Mining (SIC Code 12)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|------------------------------------|---|--|--|
| 79-01-6 Trichloroethylene | 0 | 72,482 | 72,482 |
| Total for all TRI Chemicals | 0 | 72,482 | 72,482 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Electric Utilities (SIC Code 491/493)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--|---|--|--|
| -- Polycyclic aromatic compounds | 754,957 | 691 | 755,648 |
| 108-88-3 Toluene | 0 | 141,356 | 141,356 |
| 91-20-3 Naphthalene | 94,200 | 1 | 94,201 |
| 108-95-2 Phenol | 80,108 | 0 | 80,108 |
| 1330-20-7 Xylene (mixed isomers) | 32,200 | 9,526 | 41,726 |
| 1336-36-3 Polychlorinated biphenyls (PCBs) | 46 | 18,000 | 18,046 |
| 64-18-6 Formic acid | 13,500 | 0 | 13,500 |
| 191-24-2 Benzo(g,h,i)perylene | 5,093 | 7 | 5,100 |
| 67-56-1 Methanol | 3,300 | 0 | 3,300 |
| 95-63-6 1,2,4-Trimethylbenzene | 0 | 2,153 | 2,153 |
| 100-41-4 Ethylbenzene | 0 | 1,844 | 1,844 |
| 75-07-0 Acetaldehyde | 16 | 0 | 16 |
| 50-00-0 Formaldehyde | 3 | 0 | 3 |
| 110-54-3 n-Hexane | 1 | 2 | 3 |
| 120-80-9 Catechol | 1 | 0 | 1 |
| Total for all TRI Chemicals | 983,426 | 173,579 | 1,157,005 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Chemical Wholesale Distributors (SIC Code 5169)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 0 | 2,305,413 | 2,305,413 |
| 1330-20-7 Xylene (mixed isomers) | 0 | 2,146,325 | 2,146,325 |
| 67-56-1 Methanol | 0 | 752,627 | 752,627 |
| -- Glycol ethers | 0 | 696,916 | 696,916 |
| 108-10-1 Methyl isobutyl ketone | 0 | 413,200 | 413,200 |
| 95-63-6 1,2,4-Trimethylbenzene | 0 | 212,858 | 212,858 |
| 107-21-1 Ethylene glycol | 0 | 194,034 | 194,034 |
| 71-36-3 n-Butyl alcohol | 0 | 191,604 | 191,604 |
| 100-42-5 Styrene | 0 | 133,080 | 133,080 |
| 100-41-4 Ethylbenzene | 0 | 119,292 | 119,292 |
| 110-54-3 n-Hexane | 0 | 112,970 | 112,970 |
| 75-09-2 Dichloromethane | 0 | 111,674 | 111,674 |
| 79-01-6 Trichloroethylene | 0 | 61,626 | 61,626 |
| 127-18-4 Tetrachloroethylene | 0 | 42,024 | 42,024 |
| 68-12-2 N,N-Dimethylformamide | 0 | 26,221 | 26,221 |
| 75-05-8 Acetonitrile | 0 | 16,350 | 16,350 |
| 67-66-3 Chloroform | 0 | 15,963 | 15,963 |
| 110-82-7 Cyclohexane | 0 | 15,463 | 15,463 |
| 80-62-6 Methyl methacrylate | 0 | 12,065 | 12,065 |
| 872-50-4 N-Methyl-2-pyrrolidone | 0 | 11,999 | 11,999 |
| Subtotal for Top 20 Chemicals | 0 | 7,591,704 | 7,591,704 |
| Total for all TRI Chemicals | 0 | 7,630,110 | 7,630,110 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Petroleum Terminals/Bulk Storage (SIC Code 5171)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|------------------------------------|---|--|--|
| 115-07-1 Propylene | 330,000 | 0 | 330,000 |
| 95-63-6 1,2,4-Trimethylbenzene | 0 | 100,200 | 100,200 |
| 108-88-3 Toluene | 0 | 83,658 | 83,658 |
| 1330-20-7 Xylene (mixed isomers) | 0 | 73,014 | 73,014 |
| 100-41-4 Ethylbenzene | 0 | 67,013 | 67,013 |
| 71-43-2 Benzene | 0 | 41,893 | 41,894 |
| 74-85-1 Ethylene | 20,100 | 0 | 20,100 |
| 1634-04-4 Methyl tert-butyl ether | 0 | 16,377 | 16,377 |
| 91-20-3 Naphthalene | 0 | 14,985 | 14,985 |
| 110-54-3 n-Hexane | 800 | 13,551 | 14,351 |
| 98-82-8 Cumene | 0 | 1,535 | 1,535 |
| 110-82-7 Cyclohexane | 0 | 1,462 | 1,462 |
| 75-65-0 tert-Butyl alcohol | 0 | 1,320 | 1,320 |
| -- Polycyclic aromatic compounds | 0 | 254 | 254 |
| 67-56-1 Methanol | 0 | 113 | 113 |
| 108-10-1 Methyl isobutyl ketone | 0 | 76 | 76 |
| 107-21-1 Ethylene glycol | 0 | 67 | 67 |
| 191-24-2 Benzo(g,h,i)perylene | 0 | 7 | 7 |
| 92-52-4 Biphenyl | 0.001 | 0.000 | 0.001 |
| Total for all TRI Chemicals | 350,900 | 415,526 | 766,426 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2004: Hazardous Waste/Solvent Recovery (SIC Code 7389/4953)

| CAS Number Chemname | Quantity Used for Energy Recovery On-site Pounds | Quantity Used for Energy Recovery Off-site Pounds | Total Quantity Used for Energy Recovery On-site and Off-site Pounds |
|--------------------------------------|---|--|--|
| 108-88-3 Toluene | 262,062 | 61,425,044 | 61,687,106 |
| 1330-20-7 Xylene (mixed isomers) | 283,698 | 42,448,660 | 42,732,358 |
| 67-56-1 Methanol | 276,657 | 34,756,371 | 35,033,028 |
| 108-10-1 Methyl isobutyl ketone | 47,860 | 6,326,832 | 6,374,692 |
| 110-54-3 n-Hexane | 155,680 | 5,794,524 | 5,950,204 |
| 75-09-2 Dichloromethane | 106,966 | 5,556,385 | 5,663,351 |
| 71-36-3 n-Butyl alcohol | 39,271 | 5,549,988 | 5,589,259 |
| 100-41-4 Ethylbenzene | 17,809 | 4,096,638 | 4,114,447 |
| 75-05-8 Acetonitrile | 96,387 | 3,563,708 | 3,660,095 |
| 100-42-5 Styrene | 2,670 | 3,223,181 | 3,225,851 |
| 107-18-6 Allyl alcohol | 13 | 3,152,188 | 3,152,201 |
| 127-18-4 Tetrachloroethylene | 0 | 2,292,599 | 2,292,599 |
| -- Glycol ethers | 484,247 | 1,681,169 | 2,165,416 |
| 872-50-4 N-Methyl-2-pyrrolidone | 245,647 | 1,637,624 | 1,883,271 |
| 68-12-2 N,N-Dimethylformamide | 5,681 | 1,673,158 | 1,678,839 |
| 107-21-1 Ethylene glycol | 115,202 | 1,333,486 | 1,448,688 |
| 79-01-6 Trichloroethylene | 15,939 | 732,241 | 748,180 |
| 98-95-3 Nitrobenzene | 332 | 700,368 | 700,700 |
| 123-38-6 Propionaldehyde | 0 | 533,618 | 533,618 |
| 95-50-1 1,2-Dichlorobenzene | 6,923 | 510,293 | 517,216 |
| Subtotal for Top 20 Chemicals | 2,163,044 | 186,988,075 | 189,151,119 |
| Total for all TRI Chemicals | 2,650,565 | 192,161,751 | 194,812,316 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.2, Column B (Energy recovery on-site) and Section 8.3, Column B (Energy recovery off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: All Industries

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 7647-01-0 Hydrochloric acid | 1,984,057,022 | 3,861,590 | 1,987,918,612 |
| 67-56-1 Methanol | 1,091,848,307 | 103,411,826 | 1,195,260,133 |
| 7664-41-7 Ammonia | 561,403,713 | 13,533,683 | 574,937,397 |
| 7664-93-9 Sulfuric acid | 511,884,108 | 677,199 | 512,561,307 |
| 74-85-1 Ethylene | 506,165,736 | 3,416,753 | 509,582,489 |
| 115-07-1 Propylene | 354,338,038 | 8,443,135 | 362,781,173 |
| 108-88-3 Toluene | 328,635,686 | 24,493,965 | 353,129,651 |
| -- Nitrate compounds | 197,292,640 | 115,510,814 | 312,803,454 |
| 7697-37-2 Nitric acid | 276,570,135 | 12,136,675 | 288,706,811 |
| 7782-50-5 Chlorine | 234,624,580 | 377,259 | 235,001,840 |
| 7664-39-3 Hydrogen fluoride | 230,095,097 | 2,576,924 | 232,672,021 |
| 463-58-1 Carbonyl sulfide | 151,880,521 | 10 | 151,880,531 |
| 64-18-6 Formic acid | 129,862,798 | 3,567,336 | 133,430,134 |
| 110-54-3 n-Hexane | 98,098,588 | 4,209,502 | 102,308,090 |
| 50-00-0 Formaldehyde | 88,235,831 | 3,944,008 | 92,179,839 |
| 1330-20-7 Xylene (mixed isomers) | 71,057,629 | 17,410,853 | 88,468,482 |
| 107-21-1 Ethylene glycol | 55,585,301 | 25,691,250 | 81,276,550 |
| 107-06-2 1,2-Dichloroethane | 70,806,089 | 3,487,872 | 74,293,961 |
| 79-10-7 Acrylic acid | 46,850,959 | 25,939,746 | 72,790,705 |
| 71-43-2 Benzene | 65,908,906 | 3,544,811 | 69,453,717 |
| Subtotal for Top 20 Chemicals | 7,055,201,685 | 376,235,211 | 7,431,436,897 |
| Total for all TRI Chemicals | 8,439,890,564 | 562,649,206 | 9,002,539,771 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Manufacturing* Industries

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 74-85-1 Hydrochloric acid | 1,719,324,627 | 3,741,465 | 1,723,066,092 |
| 67-56-1 Methanol | 1,077,811,574 | 101,222,518 | 1,179,034,092 |
| 115-07-1 Ammonia | 499,299,104 | 13,380,424 | 512,679,528 |
| 108-88-3 Ethylene | 505,111,036 | 3,294,172 | 508,405,208 |
| 7664-41-7 Propylene | 353,425,164 | 7,878,381 | 361,303,545 |
| 1330-20-7 Toluene | 309,198,362 | 20,649,481 | 329,847,843 |
| 7664-93-9 Nitrate compounds | 191,268,916 | 113,493,910 | 304,762,826 |
| 71-43-2 Nitric acid | 270,534,802 | 11,651,714 | 282,186,516 |
| 107-06-2 Chlorine | 225,041,263 | 377,069 | 225,418,332 |
| 75-05-8 Hydrogen fluoride | 179,420,358 | 2,414,002 | 181,834,360 |
| 110-54-3 Carbonyl sulfide | 151,880,521 | 10 | 151,880,531 |
| 100-42-5 Formic acid | 129,285,890 | 3,561,837 | 132,847,727 |
| 75-56-9 Formaldehyde | 87,126,851 | 3,928,936 | 91,055,787 |
| 100-41-4 n-Hexane | 84,789,674 | 3,800,160 | 88,589,834 |
| 75-65-0 Ethylene glycol | 53,507,593 | 24,408,265 | 77,915,858 |
| 75-00-3 Sulfuric acid | 77,172,429 | 552,263 | 77,724,692 |
| 75-07-0 Xylene (mixed isomers) | 61,546,405 | 14,123,541 | 75,669,945 |
| 79-10-7 1,2-Dichloroethane | 69,264,809 | 3,425,859 | 72,690,668 |
| 74-90-8 Acrylic acid | 46,089,121 | 25,937,015 | 72,026,136 |
| 108-95-2 1,3-Butadiene | 66,662,740 | 393,696 | 67,056,436 |
| Subtotal for Top 20 Chemicals | 6,157,761,237 | 358,234,718 | 6,515,995,955 |
| Total for all TRI Chemicals | 7,414,307,866 | 536,629,318 | 7,950,937,184 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

* Manufacturing industries include SIC code 20-39 and "no codes" category.

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Chemicals (SIC Code 28)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 7647-01-0 Hydrochloric acid | 1,665,712,056 | 874,411 | 1,666,586,467 |
| 74-85-1 Ethylene | 460,798,952 | 2,522,844 | 463,321,796 |
| 115-07-1 Propylene | 304,052,145 | 7,717,953 | 311,770,098 |
| 67-56-1 Methanol | 198,838,163 | 59,732,407 | 258,570,570 |
| 7664-41-7 Ammonia | 233,532,948 | 6,563,759 | 240,096,707 |
| 7782-50-5 Chlorine | 172,817,635 | 260,764 | 173,078,399 |
| -- Nitrate compounds | 63,109,965 | 47,174,820 | 110,284,785 |
| 7697-37-2 Nitric acid | 106,696,614 | 2,152,871 | 108,849,484 |
| 108-88-3 Toluene | 82,123,319 | 16,891,961 | 99,015,280 |
| 50-00-0 Formaldehyde | 74,656,819 | 1,446,997 | 76,103,816 |
| 107-06-2 1,2-Dichloroethane | 69,264,809 | 3,425,314 | 72,690,123 |
| 79-10-7 Acrylic acid | 46,068,066 | 25,843,520 | 71,911,586 |
| 106-99-0 1,3-Butadiene | 58,866,579 | 311,789 | 59,178,368 |
| 107-21-1 Ethylene glycol | 43,094,029 | 16,080,168 | 59,174,197 |
| 64-18-6 Formic acid | 55,075,650 | 3,359,267 | 58,434,917 |
| 110-54-3 n-Hexane | 52,842,755 | 3,616,283 | 56,459,038 |
| 71-43-2 Benzene | 51,429,434 | 3,035,830 | 54,465,265 |
| 7664-93-9 Sulfuric acid | 53,181,896 | 309,448 | 53,491,344 |
| 7550-45-0 Titanium tetrachloride | 45,164,575 | 225,098 | 45,389,673 |
| 74-90-8 Hydrogen cyanide | 44,987,428 | 18,229 | 45,005,657 |
| Subtotal for Top 20 Chemicals | 3,882,313,837 | 201,563,732 | 4,083,877,569 |
| Total for all TRI Chemicals | 4,767,162,994 | 346,596,782 | 5,113,759,776 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Primary Metals (SIC Code 33)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 7664-39-3 Hydrogen fluoride | 122,766,405 | 447,155 | 123,213,560 |
| 7697-37-2 Nitric acid | 77,533,547 | 1,327,935 | 78,861,482 |
| 7782-50-5 Chlorine | 39,354,645 | 0 | 39,354,645 |
| 7647-01-0 Hydrochloric acid | 26,069,263 | 1,990,892 | 28,060,155 |
| 7664-41-7 Ammonia | 17,154,199 | 121,837 | 17,276,036 |
| -- Nitrate compounds | 3,618,808 | 7,654,642 | 11,273,450 |
| 7429-90-5 Aluminum (fume or dust) | 2,801,989 | 8,048,162 | 10,850,151 |
| 67-56-1 Methanol | 609,016 | 8,163,156 | 8,772,172 |
| 108-95-2 Phenol | 8,361,916 | 196,483 | 8,558,399 |
| 74-85-1 Ethylene | 6,511,610 | 735,015 | 7,246,625 |
| 7440-66-6 Zinc (fume or dust) | 0 | 7,018,602 | 7,018,602 |
| 7632-00-0 Sodium nitrite | 5,266,152 | 370,729 | 5,636,881 |
| 74-90-8 Hydrogen cyanide | 4,850,038 | 0 | 4,850,038 |
| 108-88-3 Toluene | 3,790,259 | 118,052 | 3,908,310 |
| 1330-20-7 Xylene (mixed isomers) | 3,047,264 | 368,534 | 3,415,798 |
| -- Glycol ethers | 2,885,973 | 75,448 | 2,961,421 |
| 872-50-4 N-Methyl-2-pyrrolidone | 2,762,654 | 14,880 | 2,777,534 |
| -- Cyanide compounds | 2,455,545 | 147,204 | 2,602,749 |
| 95-63-6 1,2,4-Trimethylbenzene | 2,537,137 | 18,947 | 2,556,084 |
| 7664-93-9 Sulfuric acid | 2,228,007 | 52,532 | 2,280,539 |
| Subtotal for Top 20 Chemicals | 334,604,427 | 36,870,204 | 371,474,631 |
| Total for all TRI Chemicals | 349,195,341 | 37,610,797 | 386,806,138 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Paper Products (SIC Code 26)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 67-56-1 Methanol | 849,123,481 | 30,129,774 | 879,253,255 |
| 64-18-6 Formic acid | 71,403,975 | 23,233 | 71,427,208 |
| 0049-04-4 Chlorine dioxide | 41,720,388 | 0 | 41,720,388 |
| 108-88-3 Toluene | 36,486,012 | 1,447,324 | 37,933,336 |
| 7664-41-7 Ammonia | 14,098,436 | 46,841 | 14,145,277 |
| 7782-50-5 Chlorine | 10,691,710 | 82,780 | 10,774,490 |
| 7647-01-0 Hydrochloric acid | 8,512,479 | 0 | 8,512,479 |
| 75-07-0 Acetaldehyde | 7,422,959 | 129,757 | 7,552,716 |
| 50-00-0 Formaldehyde | 3,938,251 | 145,868 | 4,084,119 |
| -- Polycyclic aromatic compounds | 3,704,470 | 1,359 | 3,705,828 |
| 7664-93-9 Sulfuric acid | 3,665,279 | 0 | 3,665,279 |
| 1330-20-7 Xylene (mixed isomers) | 2,946,437 | 135,795 | 3,082,232 |
| 0028-15-6 Ozone | 2,350,000 | 0 | 2,350,000 |
| 108-95-2 Phenol | 2,299,261 | 26,088 | 2,325,349 |
| 110-54-3 n-Hexane | 2,116,806 | 22,521 | 2,139,327 |
| 120-80-9 Catechol | 977,284 | 9,565 | 986,849 |
| 75-15-0 Carbon disulfide | 774,667 | 0 | 774,667 |
| -- Nitrate compounds | 735,956 | 5,886 | 741,842 |
| 107-21-1 Ethylene glycol | 460,217 | 193,321 | 653,538 |
| 872-50-4 N-Methyl-2-pyrrolidone | 385,734 | 186,153 | 571,887 |
| Subtotal for Top 20 Chemicals | 1,063,813,801 | 32,586,265 | 1,096,400,066 |
| Total for all TRI Chemicals | 1,067,188,170 | 32,858,825 | 1,100,046,995 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Food Products (SIC Code 20)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| -- Nitrate compounds | 117,122,972 | 24,289,048 | 141,412,020 |
| 7697-37-2 Nitric acid | 35,966,926 | 3,560,539 | 39,527,465 |
| 7664-41-7 Ammonia | 28,402,707 | 4,560,362 | 32,963,070 |
| 107-21-1 Ethylene glycol | 6,055,539 | 3,544,820 | 9,600,359 |
| 7647-01-0 Hydrochloric acid | 4,984,135 | 0 | 4,984,135 |
| 7664-93-9 Sulfuric acid | 3,512,994 | 15,500 | 3,528,494 |
| 7632-00-0 Sodium nitrite | 3,171,552 | 46,708 | 3,218,260 |
| 67-56-1 Methanol | 2,022,100 | 668,149 | 2,690,249 |
| 7782-50-5 Chlorine | 1,368,322 | 1,953 | 1,370,275 |
| 75-07-0 Acetaldehyde | 1,191,575 | 127,318 | 1,318,893 |
| 75-21-8 Ethylene oxide | 1,280,875 | 511 | 1,281,386 |
| 75-56-9 Propylene oxide | 621,623 | 7,687 | 629,310 |
| 7664-39-3 Hydrogen fluoride | 461,966 | 0 | 461,966 |
| -- Glycol ethers | 122,487 | 244,739 | 367,226 |
| 10049-04-4 Chlorine dioxide | 290,510 | 18 | 290,528 |
| 10028-15-6 Ozone | 116,303 | 0 | 116,303 |
| 79-21-0 Peracetic acid | 74,746 | 911 | 75,656 |
| -- Polycyclic aromatic compounds | 66,989 | 0 | 66,989 |
| 50-00-0 Formaldehyde | 34,050 | 20,041 | 54,091 |
| 110-54-3 n-Hexane | 18,012 | 29,873 | 47,885 |
| Subtotal for Top 20 Chemicals | 206,886,384 | 37,118,178 | 244,004,561 |
| Total for all TRI Chemicals | 206,943,088 | 37,156,470 | 244,099,558 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The Chemicals with Largest Total Treated On-site and Off-site, 2004: Metal Mining (SIC Code 10)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|-------------------------------------|--|---|---|
| 7664-93-9 Sulfuric acid | 52,519,078 | 0 | 52,519,078 |
| -- Cyanide compounds | 14,344,650 | 0 | 14,344,650 |
| 7632-00-0 Sodium nitrite | 1,473,570 | 0 | 1,473,570 |
| -- Nitrate compounds | 513,000 | 0 | 513,000 |
| 7697-37-2 Nitric acid | 112,000 | 0 | 112,000 |
| 7664-41-7 Ammonia | 35,400 | 0 | 35,400 |
| 7664-39-3 Hydrogen fluoride | 3,850 | 0 | 3,850 |
| 74-90-8 Hydrogen cyanide | 2,815 | 0 | 2,815 |
| 108-88-3 Toluene | 0 | 1,000 | 1,000 |
| 1330-20-7 Xylene (mixed isomers) | 0 | 380 | 380 |
| -- Polycyclic aromatic compounds | 0 | 57 | 57 |
| -- Dioxin and dioxin-like compounds | 0.0143 | 0.0000 | 0.0143 |
| Total for all TRI Chemicals | 69,004,363 | 1,437 | 69,005,800 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The Chemicals with Largest Total Treated On-site and Off-site, 2004: Coal Mining (SIC Code 12)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|------------------------------------|--|---|---|
| 7647-01-0 Hydrochloric acid | 254,708 | 0 | 254,708 |
| 7664-93-9 Sulfuric acid | 14,109 | 0 | 14,109 |
| Total for all TRI Chemicals | 268,817 | 0 | 268,817 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The Chemicals with Largest Total Treated On-site and Off-site, 2004: Electric Utilities (SIC Code 491/493)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--|--|---|---|
| 7664-93-9 Sulfuric acid | 379,769,213 | 0 | 379,769,213 |
| 7647-01-0 Hydrochloric acid | 240,269,233 | 0 | 240,269,233 |
| 7664-41-7 Ammonia | 61,579,082 | 10,672 | 61,589,754 |
| 7664-39-3 Hydrogen fluoride | 45,463,154 | 0 | 45,463,154 |
| -- Polycyclic aromatic compounds | 2,311,102 | 36 | 2,311,138 |
| -- Barium compounds | 1,232,129 | 0 | 1,232,129 |
| 108-88-3 Toluene | 1,047,872 | 0 | 1,047,872 |
| 7782-50-5 Chlorine | 930,685 | 0 | 930,685 |
| -- Nitrate compounds | 539,879 | 0 | 539,879 |
| -- Mixtures and other trade name products | 199,676 | 0 | 199,676 |
| 95-63-6 1,2,4-Trimethylbenzene | 94,601 | 6 | 94,607 |
| 1330-20-7 Xylene (mixed isomers) | 33,109 | 0 | 33,109 |
| 91-20-3 Naphthalene | 19,990 | 797 | 20,787 |
| 191-24-2 Benzo(g,h,i)perylene | 16,223 | 0 | 16,224 |
| 7632-00-0 Sodium nitrite | 12,761 | 0 | 12,761 |
| 110-54-3 n-Hexane | 11,656 | 490 | 12,146 |
| 100-41-4 Ethylbenzene | 10,634 | 0 | 10,634 |
| 107-21-1 Ethylene glycol | 0 | 740 | 740 |
| 1336-36-3 Polychlorinated biphenyls (PCBs) | 24 | 0 | 24 |
| -- Lead compounds | 0 | 21 | 21 |
| Total for all TRI Chemicals | 733,541,022 | 12,764 | 733,553,786 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Chemical Wholesale Distributors (SIC Code 5169)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 1330-20-7 Xylene (mixed isomers) | 650 | 209,314 | 209,964 |
| 108-88-3 Toluene | 1,823 | 185,178 | 187,001 |
| 106-99-0 1,3-Butadiene | 180,000 | 0 | 180,000 |
| 7664-41-7 Ammonia | 113,412 | 34,658 | 148,071 |
| 67-56-1 Methanol | 3,792 | 143,350 | 147,142 |
| 7647-01-0 Hydrochloric acid | 114,524 | 0 | 114,524 |
| -- Glycol ethers | 296 | 75,295 | 75,592 |
| 7664-93-9 Sulfuric acid | 72,697 | 0 | 72,697 |
| 75-09-2 Dichloromethane | 2,280 | 55,106 | 57,386 |
| 7697-37-2 Nitric acid | 47,076 | 8,648 | 55,724 |
| 107-21-1 Ethylene glycol | 4 | 28,017 | 28,021 |
| 110-54-3 n-Hexane | 8,318 | 12,876 | 21,194 |
| 115-07-1 Propylene | 21,000 | 0 | 21,000 |
| 108-10-1 Methyl isobutyl ketone | 56 | 19,064 | 19,120 |
| 7664-39-3 Hydrogen fluoride | 12,991 | 724 | 13,715 |
| 79-01-6 Trichloroethylene | 10 | 13,632 | 13,642 |
| 71-36-3 n-Butyl alcohol | 31 | 12,610 | 12,641 |
| 110-82-7 Cyclohexane | 130 | 11,599 | 11,729 |
| 50-00-0 Formaldehyde | 8 | 11,083 | 11,091 |
| 100-42-5 Styrene | 247 | 10,468 | 10,715 |
| Subtotal for Top 20 Chemicals | 579,346 | 831,623 | 1,410,969 |
| Total for all TRI Chemicals | 609,168 | 889,153 | 1,498,321 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Petroleum Terminals/Bulk Storage (SIC Code 5171)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--------------------------------------|--|---|---|
| 1634-04-4 Methyl tert-butyl ether | 2,602,825 | 1,489 | 2,604,314 |
| 110-54-3 n-Hexane | 1,335,908 | 96,193 | 1,432,102 |
| 115-07-1 Propylene | 864,448 | 564,754 | 1,429,202 |
| 108-88-3 Toluene | 1,120,368 | 70,947 | 1,191,315 |
| 74-85-1 Ethylene | 1,037,274 | 122,527 | 1,159,801 |
| 71-43-2 Benzene | 611,923 | 44,275 | 656,198 |
| 1330-20-7 Xylene (mixed isomers) | 434,095 | 43,138 | 477,233 |
| 110-82-7 Cyclohexane | 157,547 | 29,986 | 187,533 |
| 100-41-4 Ethylbenzene | 97,405 | 7,634 | 105,038 |
| 95-63-6 1,2,4-Trimethylbenzene | 85,861 | 11,306 | 97,167 |
| 106-99-0 1,3-Butadiene | 65,840 | 813 | 66,653 |
| 91-20-3 Naphthalene | 17,403 | 4,755 | 22,158 |
| 107-21-1 Ethylene glycol | 0 | 12,667 | 12,667 |
| 108-38-3 m-Xylene | 11,488 | 3 | 11,491 |
| -- Glycol ethers | 3 | 4,347 | 4,350 |
| 108-10-1 Methyl isobutyl ketone | 120 | 3,408 | 3,528 |
| 75-65-0 tert-Butyl alcohol | 3,409 | 12 | 3,421 |
| 67-56-1 Methanol | 2,500 | 0 | 2,500 |
| 95-47-6 o-Xylene | 1,623 | 0 | 1,623 |
| 98-82-8 Cumene | 481 | 1,053 | 1,534 |
| Subtotal for Top 20 Chemicals | 8,450,523 | 1,019,307 | 9,469,829 |
| Total for all TRI Chemicals | 8,452,200 | 1,022,208 | 9,474,408 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2004: Hazardous Waste/Solvent Recovery (SIC Code 7389/4953)

| CAS Number Chemname | Quantity Treated On-site Pounds | Quantity Treated Off-site Pounds | Total Quantity Treated On-site and Off-site Pounds |
|--|--|---|---|
| 7647-01-0 Hydrochloric acid | 24,093,930 | 120,125 | 24,214,055 |
| 108-88-3 Toluene | 17,267,261 | 3,587,358 | 20,854,619 |
| 67-56-1 Methanol | 14,030,442 | 2,045,958 | 16,076,399 |
| 75-09-2 Dichloromethane | 8,208,423 | 5,980,361 | 14,188,783 |
| 110-54-3 n-Hexane | 11,953,031 | 299,784 | 12,252,815 |
| 1330-20-7 Xylene (mixed isomers) | 9,043,370 | 3,034,480 | 12,077,850 |
| 7782-50-5 Chlorine | 8,642,620 | 0 | 8,642,620 |
| -- Nitrate compounds | 4,970,845 | 2,011,852 | 6,982,697 |
| 7697-37-2 Nitric acid | 5,876,258 | 476,313 | 6,352,571 |
| 75-05-8 Acetonitrile | 5,445,754 | 98,492 | 5,544,246 |
| 7664-39-3 Hydrogen fluoride | 5,194,744 | 162,198 | 5,356,942 |
| 75-21-8 Ethylene oxide | 5,168,710 | 135 | 5,168,845 |
| 1336-36-3 Polychlorinated biphenyls (PCBs) | 3,833,237 | 298,075 | 4,131,311 |
| 108-10-1 Methyl isobutyl ketone | 3,178,230 | 251,509 | 3,429,739 |
| 107-21-1 Ethylene glycol | 2,077,703 | 1,241,561 | 3,319,264 |
| 107-18-6 Allyl alcohol | 3,184,444 | 18 | 3,184,462 |
| 100-41-4 Ethylbenzene | 2,692,984 | 302,287 | 2,995,271 |
| 71-36-3 n-Butyl alcohol | 2,528,006 | 351,400 | 2,879,406 |
| 127-18-4 Tetrachloroethylene | 2,110,280 | 765,872 | 2,876,152 |
| 71-43-2 Benzene | 2,672,807 | 41,120 | 2,713,927 |
| Subtotal for Top 20 Chemicals | 142,173,079 | 21,068,897 | 163,241,976 |
| Total for all TRI Chemicals | 213,707,128 | 24,094,327 | 237,801,455 |

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/tridata.

Data are from TRI Form R, Section 8.6, Column B (Treated on-site) and Section 8.7, Column B (Treated off-site).